

Three phase hybrid inverters 8 to 12 kW

# ASW H-T3 Series



Models (w/ EPS):  
ASW08kH-T3  
ASW10kH-T3  
ASW12kH-T3

Models (w/o EPS):  
ASW08kH-T3-O  
ASW10kH-T3-O  
ASW12kH-T3-O



## Easy-to-install

- Quick & easy-to-install with basic tools
- Compact wall mount design
- Simple battery and smart meter interfaces for quick and secure installation



## Reliable

- Up to 150 % PV array oversizing for higher yields
- 100% unbalanced three phase AC output during EPS mode
- UPS level switching time < 10 ms
- IP66 rated design for outdoor use



## User-friendly

- 3 independent MPPT's for flexible and higher kWp PV array design
- Setup, commissioning and monitoring via the Solplanet app
- Intelligent work modes and customisable battery management for DOD / Time of Use / Power setting
- Max. 16 A input current, ideal for bifacial and large PV modules

# Technical Datasheet

ASW08kH-T3

ASW10kH-T3

ASW12kH-T3

PV input	Max. PV array power	12000 Wp		15000 Wp		18000 Wp	
	Max. input voltage	1100 V					
	MPP voltage range / rated input voltage	200 V to 950 V / 630 V*					
	Min. input voltage / start voltage	60 V / 180 V					
	No. of independent MPPT trackers / strings per MPPT input	3 / 1					
	Max. input current / Max. power per MPP tracker	16 A	10000 W	16 A	10000 W	16 A	10000 W
	Max. short-circuit current per MPP tracker	24 A					
Battery input	Battery voltage range	120 V to 600 V					
	Max. charging / discharging power	8000 W		10000 W		12000 W	
	Max. charging current / Max. discharging current	30 A					
	Battery type	LiFePO4					
AC input	Rated grid voltage	3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V					
	Rated grid frequency	50 Hz / 60 Hz					
	Max. input power from grid	16000 W		20000 W		24000 W	
	Max. input current from grid	23.2 A		29.0 A		34.8 A	
AC output	AC voltage range / Nominal AC voltage	270V to 480V / 3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V					
	Rated AC grid frequency	50 Hz / 60 Hz					
	AC grid frequency range	45-55 Hz / 55-65 Hz					
	Rated apparent power	8000 VA		10000 VA		12000 VA	
	Max. apparent power	8000 VA		10000 VA		12000 VA	
	Rated grid output current (@400 V)	11.6 A		14.5 A		17.4 A	
	Max. grid output current(@400 V)	12.8 A		16.0 A		19.2 A	
	Harmonics THDi (@ Nominal power)	< 3 % (of nominal power)					
EPS output	Nominal output voltage	3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V					
	Nominal output frequency	50 Hz / 60 Hz					
	Rated apparent power	8000 VA		10000 VA		12000 VA	
	Rated current (@400 V)	11.6 A		14.5 A		17.4 A	
	Max. current (@400 V, continuous on-grid / off-grid)	23.2 A	11.6 A	29.0 A	14.5 A	34.8 A	17.4 A
	Max. power on each phase(@400 V, continuous on-grid / off-grid)	5333 W	2667 W	6667 W	3333 W	8000 W	4000 W
	Peak output apparent power(@400 V, continuous on-grid / off-grid up to 10s)	16000 VA	16000 VA	20000 VA	20000 VA	24000 VA	24000 VA
	Max. switch time	< 10 ms					
	Output THDv (@ Linear load)	2 %					
Efficiency	MPPT efficiency	99.9 %					
	Euro efficiency / Max. efficiency	97.2 % / 98.0 %		97.9 % / 98.4 %			
Safety protection	DC surge protection( Type II, according to EN/IEC 61643-11)	●					
	Insulation resistance detection	●					
	PV string input reverse polarity protection	●					
	Battery input reverse polarity protection	●					
	Ground fault monitoring	●					
	Residual current monitoring unit	●					
	AC short circuit protection	●					
	Anti-islanding protection	●					
General data	Power factor at rated power / adjustable displacement	1 / 0.8 leading to 0.8 lagging					
	Dimensions (W / H / D)	545 mm / 465 mm / 205 mm					
	Weight	26 kg					
	Operating temperature range	-25 °C ... +60 °C					
	Cooling concept	Natural convection					
	Degree of protection (as per IEC 60529)	IP66					
	Max. relative humidity	100 %					
	Max. operating altitude	4000 m					
Features	User interface	LED & App					
	BMS interface	CAN					
	Smart meter interface	RS485					
	Internet communication interfaces	Wifi / LAN					
	Digital output (dry contact) / No. of outputs	● / 2					
	Digital input (dry contact) / No. of inputs	● / 4					
	Integrated power control / export power control	● / ●					

● standard features ○ optional features - not available

\* The latest optimised platform design supports MPP voltage range at 150V-950V, pending subsequent certificate updates.

Version: Feb 2024



# Technical Datasheet

ASW08kH-T3-O

ASW10kH-T3-O

ASW12kH-T3-O

PV input	Max. PV array power	12000 Wp		15000 Wp		18000 Wp	
	Max. input voltage	1100 V					
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	Min. input voltage / start voltage	60 V / 180 V					
	No. of independent MPPT trackers / strings per MPPT input	3 / 1					
	Max. input current / Max. power per MPP tracker	16 A	10000 W	16 A	10000 W	16 A	10000 W
	Max. short-circuit current per MPP tracker	24 A					
Battery input	Battery voltage range	120 V to 600 V					
	Max. charging / discharging power	8000 W		10000 W		12000 W	
	Max. charging current / Max. discharging current	30 A					
	Battery type	LiFePO4					
AC input	Rated grid voltage	3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V					
	Rated grid frequency	50 Hz / 60 Hz					
	Max. input power from grid	8000 W		10000 W		12000 W	
	Max. input current from grid	11.6 A		14.5 A		17.4 A	
AC output	AC voltage range / Nominal AC voltage	270V to 480V / 3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V					
	Rated AC grid frequency	50 Hz / 60 Hz					
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Safety protection	DC surge protection(Type II, according to EN/IEC 61643-11)	●					
	Insulation resistance detection	●					
	PV string input reverse polarity protection	●					
	Battery input reverse polarity protection	●					
	Ground fault monitoring	●					
	Residual current monitoring unit	●					
	AC short circuit protection	●					
	Anti-islanding protection	●					
General data	Power factor at rated power / adjustable displacement	1/ 0.8 leading to 0.8 lagging					
	Dimensions (W / H / D)	545 mm / 465 mm / 205 mm					
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